



City of Falls Church

Department of Environmental Services

2003 Annual Water-Quality Report

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The City of Falls Church Department of Environmental Services is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

Ban bao cao co ghi nhung chi tiet quan trong ve pham chat nuoc trong cong dong quy vi. Hay nho nguoi thong dich, hoac hoi mot nguoi ban biet ro ve van de nay.

The City of Falls Church Department of Environmental Services's drinking water meets or surpasses all federal and state drinking-water standards.

Call us for information about the next opportunity for public participation in decisions about our drinking water. Falls Church City Council meetings generally are held the 2nd and 4th Mondays each month at 7:30 PM in City Hall at 300 Park Ave., Falls Church VA 22046. If you have any questions about this report, please contact Mr. Matthew Jacobi by phone at (703) 248-5070, or by email at mjacobi@ci.falls-church.va.us. More information is available on the World Wide Web at www.waterdata.com and at www.epa.gov/safewater. This report is also posted on the City's website at www.ci.falls-church.va.us.

What is the Source of My Drinking Water?

The Washington Aqueduct and the Fairfax County Water Authority supply the City of Falls Church Department of Environmental Services, which draw the water from the Potomac River. The Washington Aqueduct also supplies water to Arlington County and the District of Columbia.

Under a new program being developed by the Virginia Department of Health, a detailed source water assessment will be conducted in the near future to find ways to better protect our water sources. After the assessment, we will provide information about potential sources of contamination and measures to reduce/eliminate those sources.

How Do I Read The Charts Below?

The City of Falls Church and our water suppliers routinely monitor for constituents in your drinking water according to Federal & State laws. The first table shows the results from monitoring that that we conducted, while the second table shows the results of monitoring by The Washington Aqueduct.

In the tables you will find many terms and abbreviations that are unfamiliar. To help you better understand these terms, we've provided the following definitions:

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level or MRDL: The highest level of a residual disinfectant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of residual disinfectant below, which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

Detected Level: The highest level detected of a contaminant for comparisons against the acceptance levels for each parameter. These levels could be the single highest measurement, or an average of values depending on the contaminant.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment, or other requirement that a water system must follow.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Parts per billion (ppb): One part per billion corresponds to a single penny in \$10,000,000.

Parts per million (ppm): One part per million corresponds to a single penny in \$ 10,000.

Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.

Finished Water Characteristics, City of Falls Church Distribution System Monitoring

Substance	Unit	MCLG	MCL	Detected Level	Range	Major Sources
Total Coliform	% of samples	0	< 5	1	N/A	Naturally present in environment
Chloramines	ppm	(MRDLG) 4	(MRDL) 4	2.52	N/A	Water additive used to control microbes
Copper ¹	ppm	1.3	1.3	0.24	ND - 0.24	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead ²	ppb	0	15	6	ND - 6	Corrosion of household plumbing systems; Leaching from wood preservatives
Total Trihalomethanes	ppb	0	80	64	34 - 96	Byproduct or drinking water chlorination
Total Haloacetic Acids	ppb	N/A	60	35	3 - 47	Byproduct or drinking water chlorination

Finished Water Characteristics, Source Monitoring

Substance	Unit	MCLG	MCL	Detected Level	Range	Major Sources
2,4-D	ppb	70	70	0.13	ND - 0.31	Runoff from herbicide used on row crops
Alpha Emitters ³	pCi/L	0	15	0.7	ND – 1.8	Erosion of natural deposits
Arsenic	ppb	10	N/A	0.5	ND – 0.5	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Atrazine	ppb	3	3	0.2	ND – 0.7	Runoff from herbicide used on row crops
Barium	ppb	2	2	0.05	.030 - .06	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beta/photon Emitters ^{3,4}	PCi/L	0	50	4.0	1.9 – 6.0	Decay of natural and man-made deposits
Bromodichloromethane	ppb	N/A	N/A	9.3	3.9 – 12.5	By-product of drinking water disinfection
Chloral Hydrate ⁵	ppb	N/A	N/A	5.18	0.87 – 13.9	By-product of drinking water disinfection
Chlordibromomethane	ppb	N/A	N/A	2.5	0.8 – 5.4	By-product of drinking water disinfection
Chloroform	ppb	N/A	N/A	30	10.7 – 62.2	By-product of drinking water disinfection
Chloropicin ⁵	ppb	N/A	N/A	1.06	ND – 3.04	By-product of drinking water disinfection
Chromium	ppb	100	100	1.4	ND – 3	Discharge from steel & pulp mills; Erosion of natural deposits
Cyanogen Chloride ⁵	ppb	N/A	N/A	1.57	ND – 3.91	By-product of drinking water disinfection
Dalapon	ppb	200	200	0.22	ND – 1.36	Runoff from herbicide used on rights of way
Fluoride	ppm	4	4	0.87	0.66 – 1.01	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories
Total Halonitriles ⁵	ppb	N/A	N/A	6.12	2.78 – 13.5	By-product of drinking water disinfection
Total Ketones ⁵	ppb	N/A	N/A	4.12	1.8 – 8.67	By-product of drinking water disinfection
Metolachlor	ppb	N/A	N/A	0.1	ND – 0.2	Runoff from herbicide used on row crops
Nitrate	ppm	10	10	1.6	ND – 4.4	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits
Nitrite	ppm	1	1	0.12	ND – 0.12	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine	ppb	4	4	0.1	ND – 0.4	Herbicide runoff
Turbidity ⁶	NTU	N/A	TT	0.08	--	Soil runoff

Water-Quality Table Footnotes

- 1) No samples exceeded AL. Data is from 2001 due to Ultimate Reduced Monitoring Status. Next monitoring will be in 2004.
- 2) One sample exceeded AL. Data is from 2001 due to Ultimate Reduced Monitoring Status. Next monitoring will be in 2004.
- 3) Testing performed in 1999.
- 4) The MCL for the Beta particles is written as 4 mrem/year. EPA considers 50 pCi/l to be the level concern for Beta particles.
- 5) Testing performed in 1998.
- 6) 99.999% of samples tested were below the treatment technique level of 0.5 NTU. The single highest measurement was 0.6 NTU. Any single measurement in excess of 1.0 NTU is a violation unless otherwise approved by the state. Turbidity is measured because it is a good indicator of the effectiveness of the filtration system used.

Key To Tables

AL = Action Level

MCLG = Maximum Contaminant Level Goal

NTU = Nephelometric Turbidity Units

pCi/l = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

MCL = Maximum Contaminant Level

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

ND = none detected

N/A = not applicable

mrem/year = millirems per year

TT = Treatment Technique

About *Cryptosporidium*

Our water suppliers have analyzed for *Cryptosporidium* and results showed that none were detected. This parasite can cause outbreaks of intestinal disease, but scientists have not yet determined the best testing methods, or the levels at which a public health danger occurs. Based on current knowledge, *Cryptosporidium* does not present a health risk for the general public.

Important Health Information About Drinking Water

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Should Some People Take Special Precautions?

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

New Arsenic Standard for Drinking Water

While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Effective February, 2002, the Maximum Contaminant Level for arsenic was reduced from 50 ppb to 10 ppb. If you would like to know more about EPA's standards for arsenic in drinking water, more information is available at www.epa.gov/safewater/arsenic/html.

Want More Information?

If you have any questions about this report, or need more information, please let us know.

Customer Service Division (billing questions) (703) 248-5071

Public Utilities Division (technical questions) (703) 248-5070

This report may be viewed on the Web at: <www.ci.falls-church.va.us>

Please address correspondence to:

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